IN THE ABSTRACT

Please replace the abstract with the following amended abstract.

An apparatus is disclosed for surface sterilization of foods using[[,]] a "germicidal" such as light waves radiation (e.g., ultraviolet), and in some cases possibly in combination with (or replaced by) sound waves and ozone. The surface sterilizer apparatus may includes a plurality of germicidal (e.g., ultraviolet) emitters for surface sterilization of foods that are, e.g., rotated in a drum or rotated via a screw auger. Assemblies Emitter assemblies of emitters for the germicidal may be constructed to be for watertightness (i.e., to withstand [[a]] high pressure, heated water spray), and movable relative to the drum or screw conveyor for easy cleaning and maintenance. The apparatus may also Embodiments include a controller (e.g., programmable logic controller) for controlling the sterilization process so that the preventing harm to nearby apparatus does not endanger personnel nearby, and so that for proper food sterilization the food is properly sterilized. The controller may vary varies the an amount of germicidal used, the rate that food traverses the apparatus, the <u>apparatus</u> inclination of the apparatus, and terminates sterilization processing when an unsafe condition is detected. The apparatus Embodiments may be used in-line with other food processing equipment for the real-time food sterilization of food., and The controller may also-communicate with upstream food processing components upstream of the apparatus for controlling the food flow effood to the surface sterilizer apparatus.